

Due to a misunderstanding, the surveys in Devil's Tower were not carried out as planned. When the observers arrived at the park, they learned that there was a request for visitors to voluntarily remain on trails, in part due to Native American religious beliefs around the time of the summer solstice. Therefore, observers chose to limit their survey effort to roads and trail. In 2003, observers will include off-trail areas during surveys and will visit the park at a time that avoids potential conflicts with the summer solstice period.

### ***Inventory***

Forty species were observed during June 15-16, 2002 (Appendix B), all of which were likely breeding or summering in the area. All areas accessible by trail or road were searched. However, because the inventory was conducted only from roads and trails, it cannot be considered complete. Breeding was confirmed for American Robin, Barn Swallow, Cliff Swallow, European Starling and Bullock's Oriole. The only previously undocumented species that was observed during the inventory was Northern Saw-whet Owl. However, this and several other species listed as 'expected' on the I&M list are already documented in the park according to the park's own bird checklist ([http://www.nps.gov/deto/bird\\_list.htm](http://www.nps.gov/deto/bird_list.htm)).

The number of birds recorded during the inventory was most likely affected by the limitation of the survey to roads and trails. Due to the diversity of habitats found here, including riparian woodlands, native grasslands and ponderosa pine forest, the park probably supports a greater number of breeding bird species than suggested by these results. It is anticipated that in 2003 the surveys will cover the habitats not surveyed in 2002.

### ***Monitoring***

Because the observer limited his activity to roads and trails, one point-transect was established in ponderosa pine forest along the Tower Trail, starting by the Tower Trail sign and map (Figure 1). Due to the short length of this trail, only 6 point-counts were conducted along this transect. In 2003, a new survey route will be established that transects this stand at a random bearing.

Twenty-three species were recorded on point-counts, but none were observed in great enough numbers to estimate density (Table 3). Average density of all bird species combined was estimated at 12.17 birds/ha (Table 4), although this estimate includes some birds more closely associated with cliffs (e.g. Rock Dove, White-throated Swift) rather than the ponderosa pine forest. Although the numbers of White-throated Swifts observed was above the threshold of observations needed for such estimates, the uneven distribution of these observations does not allow for a reliable density estimate.